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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,295	10/20/2003	Richard M. Barrett JR.	073671.0184	4284

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BAKER BOTTS L.L.P.
2001 ROSS AVENUE
SUITE 600
DALLAS, TX 75201-2980

EXAMINER

LEE, CHRISTOPHER E

ART UNIT	PAPER NUMBER
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2111

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/09/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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glenda.orrantia@hotmail.com
mike.furr@bakerbotts.com
ptomail1@bakerbotts.com

Office Action Summary

Application No.

10/689,295

Applicant(s)

BARRETT ET AL.

Examiner

Christopher E. Lee

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-19,22-32, and 35-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6,9-19,22-32 and 35-39 is/are allowed.
- 6) ☒ Claim(s) 40-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Receipt Acknowledgement

1. Receipt is acknowledged of the After Final Amendment filed on 14th of November 2006.

Claims 27 and 40-45 have been amended; no claim has been canceled; and no claim has been

5 newly added since the CIP Final Office Action was mailed on 3rd of October 2006.

2. Receipt is acknowledged of the request filed on 21st of December 2006 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on the Application No. 10/689,295, which the request is acceptable and an RCE has been established. Currently, claims 1-6, 9-19, 22-32, and 35-45 are pending in this Application.

10

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

15

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhou et al. [US 2006/0098620 A1; hereinafter Zhou] in view of van der Tuijn [US 6,683,886 B1; hereinafter Tuijn].

Referring to claim 40, Zhou discloses a system (i.e., communication systems; See paragraph [0002]) for providing both wireline and wireless connections (i.e., wireline connection between Mobile Bridge 110 and Wired WAN 130, and wireless connection between said Mobile Bridge 110 and Wireless WAN 120 in Fig. 1A) to a wireline interface (i.e., Wired LAN Ethernet 312 of Fig. 3; See paragraph [0026]), the system (i.e., said communication systems) comprising:

- a first wireline interface (i.e., Wired LAN Ethernet 312 of Fig. 3);
- a second wireline interface (i.e., Wired WAN Ethernet 315 of Fig. 3);
- a wireless interface (i.e., Radio Interfaces 324 of Fig. 3); and
- a switch (i.e., STP Bridge 311 and NAT 314 in Fig. 3) coupled to the first and second wireline and wireless interfaces (See paragraphs [0042]-[0043]), the switch being operable to selectively:

- couple the first wireline interface (i.e., said Wired LAN Ethernet) to the second wireline interface (i.e., said Wired WAN Ethernet) to allow communication between the first and second wireline interfaces (See paragraph [0028], lines 1-4); and
- couple the first wireline interface (i.e., said Wired LAN Ethernet) to the wireless interface (i.e., said Radio Interfaces) to allow communication between the first wireline interface and the wireless interface (See paragraph [0028], lines 4-9).

Zhou does not teach the wireless interface comprises a first wireless interface that is operable to communicate with a second wireless interface via a first wireless connection, and further operable to communicate with a third wireless interface via a second wireless

connection; and communications associated with the first wireless connection and communications associated with the second wireless connection are scheduled according to priority levels assigned to communication devices associated with the second and third wireless interfaces.

5 Tuijn discloses a wireless communication method (See col. 1, lines 10-13), wherein

- a first wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Master communication device 14 in piconet 12e; See col. 4, lines 25-56) that is
 - operable to communicate with a second wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Slave communication device 14 in piconet 12e) via a first wireless connection (See Figs. 3-4, i.e., communication link 16 between said Master communication device and said Slave communication device in said piconet 12e), and further
 - operable to communicate with a third wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Master/Slave communication device 14 in said piconet) via a second wireless connection (See Figs. 3-4, i.e., communication link 16 between said Master communication device and said Master/Slave communication device in said piconet); and
- communications associated with the first wireless connection and communications associated with the second wireless connection (i.e., communications on the plurality of communication links 16 on said piconet 12e in Fig. 3) are scheduled according to priority levels (i.e., prioritization; See col. 5, lines 10-18 and 44-65) assigned to communication devices associated with the second and third wireless interfaces (i.e., priority of said Slave communication device associated with said communication circuitry of said Slave communication device and priority of Master/Slave communication device associated

with said communication circuitry of said Master/Slave communication device on said piconet; See col. 7, lines 36-40 and 60-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said wireless communication method, as disclosed by Tuijn, in said wireless interface (i.e., Radio Interfaces), as disclosed by Zhou, for the advantage of configuring to process the communications (i.e., wireless signals) and to prioritize an order of communications (i.e., communication of the wireless signals) with respective remote communication devices (See Tuijn, col. 3, lines 1-5).

10 *Referring to claim 41, Tuijn teaches*

- the priority levels (i.e., priorities) are predetermined (i.e., initially determined; See col. 7, lines 36-38) and stored in a memory (i.e., means for storing information including communication link priority; See col. 5, lines 29-34).

15 *Referring to claim 42, Zhou discloses a method (i.e., communication methods; See paragraph [0002]) for providing both wireline and wireless connections (i.e., wireline connection between Mobile Bridge 110 and Wired WAN 130 and wireless connection between said Mobile Bridge 110 and Wireless WAN 120 in Fig. 1A) to a wireline interface (i.e., Wired LAN Ethernet 312 of Fig. 3; See paragraph [0026]), the method comprising selectively:*

- 20 • coupling a first wireline interface (i.e., Wired LAN Ethernet 312 of Fig. 3) to a second wireline interface (i.e., Wired WAN Ethernet 315 of Fig. 3) to allow communication between the first and second wireline interfaces (See paragraph [0028], lines 1-4); and

- coupling the first wireline interface (i.e., said Wired LAN Ethernet) to a first wireless interface (i.e., Radio Interfaces 324 of Fig. 3) to allow communication between the first wireline interface and the first wireless interface (See paragraph [0028], lines 4-9).

Zhou does not teach the method further comprising scheduling communications between
5 the first wireless interface and a second wireless interface and communications between the first wireless interface and a third wireless, wherein the scheduling is performed according to priority levels assigned to communication devices associated with the second and third wireless interfaces.

Tuijn discloses a wireless communication method (See col. 1, lines 10-13), wherein

- 10 • scheduling communications (i.e., prioritizing order of communications; See col. 5, lines 10-18 and 44-65) between a first wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Master communication device 14 in piconet 12e) and a second wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Slave communication device 14 in piconet 12e) and communications between the first wireless interface and a third
15 wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Master/Slave communication device 14 in said piconet; See col. 4, lines 25-56), wherein
 - the scheduling (i.e., said prioritizing order of communications) is performed according to priority levels (See col. 5, lines 10-18 and 44-65) assigned to communication devices associated with the second and third wireless interfaces
20 (i.e., priority of said Slave communication device associated with said communication circuitry of said Slave communication device and priority of Master/Slave communication device associated with said communication circuitry of said Master/Slave communication device on said piconet; See col. 7, lines 36-40 and 60-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said wireless communication method, as disclosed by Tuijn, in said method, as disclosed by Zhou, for the advantage of configuring to process the communications (i.e., wireless signals) and to prioritize an order of communications (i.e., communication of the
5 .. wireless signals) with respective remote communication devices (See Tuijn, col. 3, lines 1-5).

Referring to claim 43, Tuijn teaches

- the priority levels (i.e., priorities) are predetermined (i.e., initially determined; See col. 7, lines 36-38) and stored in a memory (i.e., means for storing information including
10 .. communication link priority; See col. 5, lines 29-34).

*Referring to claim 44, Zhou discloses logic (i.e., communication methods; See paragraph [0002]) for providing both wireline and wireless connections (i.e., wireline connection between Mobile Bridge 110 and Wired WAN 130 and wireless connection between said Mobile
15 .. Bridge 110 and Wireless WAN 120 in Fig. 1A) to a wireline interface (i.e., Wired LAN Ethernet 312 of Fig. 3; See paragraph [0026]), the logic encoded in recordable media and when executed, selectively performing steps (i.e., STP bridge software module 311 and NAT/NAPI software module 314 in Fig. 3; See paragraphs [0042] and [0043]) comprising:*

- causing a switch (i.e., STP Bridge 311 and NAT 314 in Fig. 3) to communicatively couple
20 .. a first wireline interface (i.e., Wired LAN Ethernet 312 of Fig. 3) to a second wireline interface (i.e., Wired WAN Ethernet 315 of Fig. 3) to allow communication between the first and second wireline interfaces (See paragraph [0028], lines 1-4); and
- causing a switch (i.e., STP Bridge 311 and NAT 314 in Fig. 3) to communicatively couple the first wireline interface (i.e., said Wired LAN Ethernet) to a first wireless interface (i.e.,

Radio Interfaces 324 of Fig. 3) to allow communication between the first wireline interface and the first wireless interface (See paragraph [0028], lines 4-9).

Zhou does not teach the logic further scheduling communications between the first wireless interface and a second wireless interface and communications between the first wireless interface and a third wireless interface, wherein the scheduling is performed according to priority levels assigned to communication devices associated with the second and third wireless interfaces.

Tuijn discloses a wireless communication method (See col. 1, lines 10-13), wherein

- scheduling communications (i.e., prioritizing order of communications; See col. 5, lines 10-18 and 44-65) between a first wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Master communication device 14 in piconet 12e) and a second wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Slave communication device 14 in piconet 12e) and communications between the first wireless interface and a third wireless interface (See Figs. 3-4, i.e., communication circuitry 19 of Master/Slave communication device 14 in said piconet; See col. 4, lines 25-56), wherein

- the scheduling (i.e., said prioritizing order of communications) is performed according to priority levels (See col. 5, lines 10-18 and 44-65) assigned to communication devices associated with the second and third wireless interfaces (i.e., priority of said Slave communication device associated with said communication circuitry of said Slave communication device and priority of Master/Slave communication device associated with said communication circuitry of said Master/Slave communication device on said piconet; See col. 7, lines 36-40 and 60-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said wireless communication method, as disclosed by Tuijn, in said logic, as disclosed by Zhou, for the advantage of configuring to process the communications (i.e., wireless signals) and to prioritize an order of communications (i.e., communication of the wireless signals) with respective remote communication devices (See Tuijn, col. 3, lines 1-5).

Referring to claim 45, Tuijn teaches

- the priority levels (i.e., priorities) are predetermined (i.e., initially determined; See col. 7, lines 36-38) and stored in a memory (i.e., means for storing information including communication link priority; See col. 5, lines 29-34).

Allowable Subject Matter

6. Claims 1-6, 9-19, 22-32, and 35-39 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 1, 14, and 27, the claim limitations of the respective claims 1, 14, and 27 are deemed allowable over the prior art of record as the prior art fails to teach or suggest that the override is delayable until a particular communication between the first wireline interface and the second wireline interface has been completed.

The claims 2-6 and 9-13 are dependent claims of the claim 1.

The claims 15-19 and 22-26 are dependent claims of the claim 14.

The claims 28-32 and 35-39 are dependent claims of the claim 27.

Response to Arguments

8. Applicants' arguments with respect to claims 40-45 have been considered but are moot in view of the new ground(s) of rejection.

In fact, the Applicants argue with the new issue being drawn to the limitation

"communications associated with the first wireless connection and communications associated with the second wireless connection are scheduled according to priority levels assigned to communication devices associated with the second and third wireless interfaces," which had not
5 been properly considered in the prior Office Action, and thus, the Applicants' argument on this point is moot in view of further consideration requirement. However, the obviousness of the extended scope of the claimed invention is still suggested by Zhou in view of Tuijn in the record (See paragraph 5 of the instant Office Action, Claims 40-45 rejection under 35 U.S.C. 103(a) as being unpatentable over Zhou in view of Tuijn).

10 Furthermore, Tuijn teaches (1) initially determined priorities for a plurality of communication devices at col. 7, lines 36-38 (i.e., predetermined priority levels assigned to communication devices), and further (2) the information regarding to said priorities are stored in Link Control Block at col. 5, lines 29-34 (i.e., being stored in a memory).

15

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E. Lee whose telephone number is 571-272-3637. The examiner can normally be reached on Monday through Friday, 9:30am - 6:00pm (EST).

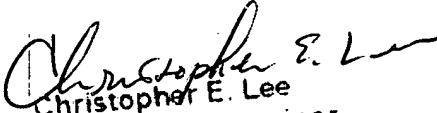
If attempts to reach the examiner by telephone are unsuccessful, the examiner's
20 supervisor, Mark H. Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher E. Lee
Primary Patent Examiner
Art Unit 2111

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CEL/


Christopher E. Lee
Primary Patent Examiner
Technology Center 2100